pediatric pulmonology

Volume 10, 1991

George Polgar
Editor

Wiley-Liss, Inc.

© 1991 Wiley-Liss, Inc.
605 Third Avenue
New York, NY 10158-0012

Contents

Volume 10 • Number 1 • 1991

1 **From the Editor**

Original Articles

2 Effect of Inhaled Beclomethasone Dipropionate on Bronchial Hyperreactivity in Asthmatic Children During Maximal Allergen Exposure
A.L. Boner, G.P. Piacentini, C. Bonizzato, V. Dattoli, and L. Sette

6 Analysis of Expiratory Pattern for Monitoring Bronchial Obstruction in School-Age Children
Renato Cutrera, Slavi I. Filtchev, Rocco Merolla, Grzegorz Willim, Janusz Haluszka, and Roberto Ronchetti

11 Ultrastructural Ciliary Defects in Children With Recurrent Infections of the Lower Respiratory Tract
Ezio G. Barlocco, Enrico A. Valletta, Mario Canciani, Giuseppe Lungarella, Concetta Gardi, M. Margherita De Santi, and Gianni Mastella

18 The Paradox of Adult Respiratory Distress Syndrome in Neonates
Juerg Pfenninger, Heinz Tschaeppeler, Bendicht Peter Wagner, Jann Weber, and Arthur Zimmerman

25 Digital Clubbing and Pulmonary Function Abnormalities in Children With Lung Disease
James Y. Paton, Daisy B. Bautista, Michael W. Stabile, Amy E. Waldman, Annette G. Nassar, Arnold C.G. Platzker, and Thomas G. Keens

30 Gastrin-Releasing Peptide Gene Products in Midtrimester Human Fetal Lung With and Without Maternal Smoking History During Pregnancy
M.F. Chen, S.J. Lewis, R. Jagoe, N. Alexander, S. Van Noorden, D.R. Springall, and J.M. Polak

36 Do Wheezy Infants Recovering From Bronchiolitis Respond to Inhaled Salbutamol?
Peter D. Sly, Celia J. Lanteri, and Joan M. Raven

40 The Effect of Triclofos Sodium Sedation on Respiratory Rate, Oxygen Saturation, and Heart Rate in Infants and Young Children
E.A. Jackson, P.S. Rabbette, C. Dezateux, D.J. Hatch, and J. Stocks

46 Morphometric and Biochemical Changes in Lungs of Growing Rats Treated With a Calmodulin Antagonist
Anwuli F. Ofulue, Harman Sekhon, Kamala Cherukupalli, Hassan Khadempour, and William M. Thurlbeck

Diagnostic Methods

52 Effect of Infant Position on Breath Amplitude Measured by Transthoracic Impedance and Strain Gauges
Terry M. Baird and Michael R. Neuman

Case Report

57 Progressive Pulmonary Lymphangiectasia
Lawrence J. Sindel, Will R. Blackburn, Byron G. Brogdon, and Robert O. Harris, III

63 **Correspondence**

65 **Selected Abstracts**

Volume 10 • Number 2 • 1991

71 **Perspectives**

72 **From the Editor**

72 **To Authors and Reviewers**

73 **Guest Editorial**

TGV or Not TGV in WB?—That Is The Question
S. Godfrey

77 **Commentary**
Peter D. Phelan and Peter D. Sly

78 **From the Editor**

Original Articles

79 Effectiveness and Safety of Small vs. Large Doses of Enteric Coated Pancreatic Enzymes in Reducing Steatorrhea in Children With Cystic Fibrosis: A Prospective Randomized Study
Mary Sue Brady, Karyl Rickard, Pao-Lo Yu, and Howard Eigen

86 Circulating Levels of Tumor Necrosis Factor and Interleukin-1 in Cystic Fibrosis
Mark A. Brown, Wayne J. Morgan, Paul R. Finley, and Philip Scuderi

92 Respiratory Tract Colonization With *Pseudomonas aeruginosa* in Cystic Fibrosis: Correlations Between Anti-*Pseudomonas aeruginosa* Antibody Levels and Pulmonary Function
Glenna B. Winnie and Robert G. Cowan

101 Exercise Performance and Breathing Patterns in Cystic Fibrosis: Male-Female Differences and Influence of Resting Pulmonary Function
David M. Orenstein and Patricia A. Nixon

106 Repeated Provocation Tests in Asthmatic Children for Testing Tachyphylaxis to Histamine
Ruurd Jan Roorda, Jorrit Gerritsen, Wim M.C. van Aalderen, Jan P. Schouten, and Klaas Knol

112 Sleep Apnea and Hypoxemia in Recently Weaned Premature Infants With and Without Bronchopulmonary Dysplasia
K.C. Sekar and James C. Duke

117 Measurement of Respiratory System Resistance by Forced Oscillation in Normal Children: A Comparison With Spirometric Values
P. Lebecque, K. Desmond, Y. Swartebroeckx, P. Dubois, J. Lulling, and A. Coates

123 Acute Effect of Passive Smoking on Lung Function and Airway Responsiveness in Asthmatic Children
Maike Oldigs, Rudolf Jörres, and Helgo Magnussen

Diagnostic Methods

132 Pulse Oximetry Versus Measured Arterial Oxygen Saturation: A Comparison of the Nellcor N100 and the Biox III
Patrick Lebecque, Polycarpe Shango, Maddy Stijns, André Vliers, and Allan L. Coates

Therapeutic Methods

136 Delivery of Aerosolized Medication to Intubated Babies
Kristi L. Watterberg, Andrew R. Clark, H. William Kelly, and Shirley Murphy

142 **Correspondence**

144 **Selected Abstracts**

Volume 10 • Number 3 • 1991

Editorials

149 From the Editor

149 To Authors and Reviewers

150 Pediatric Respiratory Medicine in Europe
Maximilian S. Zach

Original Articles

157 Differential Effects of Oxygen and Barotrauma on Lung Injury in the Neonatal Piglet
Jonathan M. Davis, Bryon Dickerson, Leon Metlay, and David P. Penney

164 Activated Polymorphonuclear Leukocytes Inhibit Phosphatidylcholine Synthesis in Cultured Type II Alveolar Cells
Jerry J. Zimmerman and June R. Lewandoski

172 Airway Pressures During Crying: An Index of Respiratory Muscle Strength in Infants With Neuromuscular Disease
Felix Roberto Shardonofsky, Daniel Perez-Chada, and Joseph Milic-Emili

178 Benefits and Complications of Troleandomycin (TAO) in Young Children With Steroid-Dependent Asthma
Terence R. Flotte and Gerald M. Loughlin

183 A Randomized Placebo-Controlled Study to Evaluate the Effects of Oral Albuterol on Pulmonary Mechanics in Ventilator-Dependent Infants at Risk of Developing BPD
John L. Stefano, Vinod K. Bhutani, and William W. Fox

191 Effect of Salbutamol on Specific Airway Resistance in Infants With a History of Wheezing
Leszek Orłowski, Czesław Zychowicz, Marek Migdał, and Piotr Gutkowski

195 Birthweight, Early Passive Respiratory System Mechanics, and Ventilator Requirements as Predictors of Outcome in Premature Infants With Respiratory Failure
Haresh Kirpalani, Barbara Schmidt, Susan Gaston, Rosa Santos, and Rosalie Wilkie

Case Report

199 Sudden Severe Bradycardia in Infancy
Dorothy H. Kelly, Ambadas Pathak, and Robert Meny

Therapeutic Methods

205 Use of Exercise in the Management of Cystic Fibrosis: Short Communication About a Survey of Cystic Fibrosis Referral Centers
Ted A. Kaplan, James D. ZeBranek, and Robert M. McKey, Jr.

208 Aerosol Delivery in Neonatal Ventilator Circuits: A Rabbit Lung Model
Duncan Cameron, Rosemary Arnot, Michelle Clay, and Michael Silverman

Conference Reports

214 Infant Pulmonary Function Testing Workshop I, Boston, Massachusetts, USA, May 19, 1990
Julian L. Allen and Robert G. Castile

219 Infant Pulmonary Function Testing Workshop II, London, England, September 12, 1990
Janet Stocks and Michael Silverman

223 **Book Reviews**

225 **Selected Abstracts**

227 **Pediatric Pulmonology News**

Volume 10 • Number 4 • 1991

Original Articles

231 Pulmonary Manifestations of HIV Infection in Children
Joanne Marolda, Bella Pace, Richard J. Bonforte, Neal M. Kotin, Jack Rabinowitz, and Meyer Kattan

236 Changes in Lung Mechanics and Histamine Responsiveness After Sequential Canine Adenovirus 2 and Canine Parainfluenza 2 Virus Infection in Beagle Puppies
Stuart F. Quan, Mark L. Witten, Roni Grad, C. George Ray, and Richard J. Lemen

244 Relationship Between Response to Inhaled Salbutamol and Methacholine Bronchial Provocation in Children With Suspected Asthma
Haim Bibi, Mark Montgomery, Hans Pasterkamp, and Victor Chernick

249 Epidemiology of Cystic Fibrosis in Latin America: Preliminary Communication
Carlos N. Macri, Angela S. de Gentile, Alberto Manterola, Silvana Tomezzoli, Francisco Caldeira Reis, Isabel Largo Garcia, and José Luis Lezana Fernandez

254 Bacterial Infection in Under School Age Children With Expiratory Difficulty
Matti Korppi, Maija Leinonen, Markku Koskela, P. Helena Mäkelä, Pekka Saikku, and Kari Launiala

260 Luminal Surfaces of Fetal Rat Alveolar Type II and Clara Lung Cells React With Antibody to Heymann Nephritis Antigen
Robert V. Kotas, John J. Kanalas, Fermin O. Tio, and Sudesh P. Makker

267 Predicted Values for Lung Diffusing Capacity in Healthy Children
Samya Z. Nasr, Patricia Amato, and Robert W. Wilmott

273 Cold Air Challenge of Airway Reactivity in Children: A Correlation of Transcutaneously Measured Oxygen Tension and Conventional Lung Functions
Ernst Eber, Eva-Maria Varga, and Maximilian S. Zach

State of the Art Review

278 Malnutrition and Lung Growth
Claude Gaultier

Diagnostic Methods

287 Effect of Vascular Puncture on Blood Gases in the Newborn
Eun H. Kim, Ronald S. Cohen, and Pramela Ramachandran

291 Comparison of Three Methods for Measuring Respiratory Mechanics in Ventilated Children
Michael Seear, David Wensley, and Heinrich Werner

296 Doppler Echocardiographic Evaluation of Pulmonary Artery Pressure in Pneumonia of Infants and Children
Du Jun-Bao, Li Shu-Zheng, Wang Bao-Lin, and Li Yuan

Case Reports

299 Plasma Cell Granuloma of the Lung: Associated Laboratory Findings and Ultrastructural Evidence of Inflammatory Origin
J. Hammer, E. Grädel, E. Signer, H. Ohnacker, B.P. Rinderknecht, and M. Rutishauser

304 Recurrent Respiratory Infections in a Child With Fucosidosis: Is the Mucus Too Thin for Effective Transport?
Bruce K. Rubin, Patrick M. MacLeod, Jennifer Sturgess, and Malcolm King

310 Congenital Pulmonary Lymphangiectasia
Alfred Huber, Dietmar Schranz, Ingelborg Blaha, Thomas Schmitt-Mechelke, and Reinhard Schumacher

314 **Correspondence**

316 **Selected Abstracts**

320 **Book Review**

321 **Pediatric Pulmonology News**

323 **Author Index to Volume 10**

325 **Subject Index to Volume 10**